

BOTANICAL MUSEUM LEAFLETS

HARVARD UNIVERSITY

BRIDGE, MASSACHUSETTS, JANUARY 2, 1941

VOL. 9, No. 2

PLANTAE MEXICANAE VIII

BY

RICHARD EVANS SCHULTES

NEW AND SIGNIFICANT SPECIES OF *PLEUROTHALLIS* FROM OAXACA

THE following species of *Pleurothallis* were collected by the writer in the northeastern part of Oaxaca, Mexico. Specimens of the collections are preserved in the Ames Herbarium. The following notes are presented in view of the fact that the collections represent undescribed or rare orchids which add to our knowledge of distribution.

***Pleurothallis Grobyi* Bateman ex Lindley** in Bot. Reg. 21 (1836) t. 1797.

MEXICO: Oaxaca, District of Cuicatlán, Cerro Machin, San Juan Zautla, long. $96^{\circ}40'$, lat. $17^{\circ}58'$, altitude 450 m., June 29, 1939, *Schultes 739*.

The range of *Pleurothallis Grobyi* is very wide, including Central America, South America as far south as Brazil, and the West Indies. It has been known from Mexico by collections made in Vera Cruz and in Chiapas. It is especially well represented in the Ames Herbarium from Chiapas. *Schultes 739* is the first collection reported from Oaxaca and extends the range of the species considerably northwestward.

Pleurothallis Halbingeriana *R. E. Schultes* sp.

nov.

Herba epiphytica, minima, repens. Radices fibrosae, glabrae. Caules primarii breves, repentes. Caules secundarii plusminusve erecti, apice unifoliati. Folium sessile, ellipticum, apice mucronatum, leviter coriaceum. Pedunculi folium superantes. Flores pauci, succedanei, in racemis brevibus. Sepala lateralialia late obovata, acuminata, fere usque ad basim libera, uninervia. Sepalum dorsale simile. Petala elliptica, aliquid obtusa, sepalis crassiora. Labellum lanceolato-acuminatum, carnosum, carnosum cum apice inflexo. Columna supra dilatata, grandibus cum stelidiis lateralibus. Stigmata in columnae brachiis lateralibus infra rostellum confluentia. Flos omnino subviridi-flavidus.

Plant epiphytic, very small, repent. Roots fibrous, smooth. Primary stems abbreviated, repent. Secondary stems more or less erect, 2 mm. or less in length, each loosely invested by two hyaline sheaths, monophyllous at their apex. Leaf sessile, 6–9 mm. long, 2.5–3.5 mm. wide at the middle, elliptic, strongly mucronate at the apex, somewhat coriaceous. Peduncles conspicuously overtopping the leaves, up to 15 mm. long, with several closely appressed tubular bracts, one at the base, one near the middle. Flowers borne in succession on an abbreviated raceme. Raceme up to 5-flowered. Rachis 1–3 mm. long. Bracts of raceme subequal to or shorter than the pedicels, scarious. Pedicels (without ovary) less than 1 mm. long. Lateral sepals broadly obovate, long-acuminate, 1 mm. long, 0.75 mm. wide, free almost to the base, 1-nerved. Dorsal sepal similar, 1 mm. long, 0.75 mm. wide or less. Petals elliptical, somewhat obtuse, 1 mm. long, 0.5 mm. wide, fleshy, with an inflexed tip. Lip lanceolate-acuminate, fleshy, with an inflexed tip, about 1 mm. long, 0.5 mm. wide. Column dilated up-

wards, about 0.8 mm. long, with prominent lateral arms. Stigmas on the lateral arms confluent below the rostellum. All parts of the flower pale greenish yellow.

MEXICO: San Juan Lalana (near Santiago Choapam), long. $95^{\circ}45'$, lat. $17^{\circ}25'$, District of Choapam, Oaxaca, at about 1900 feet (about 600 meters) altitude, May 7, 1939, *Richard Evans Schultes & Blas Pablo Reko 805* (TYPE in Herb. Ames No. 57280; ISOTYPES in Herb. Inst. Biología (Chapultepec, Mexico), in Herb. Field Museum, in Herb. Halbinger and in Herb. Schultes).

I take great pleasure in naming this new species of *Pleurothallis* in honor of Mr. Christian Halbinger, in recognition of his interest in the furtherance of the study of Mexican Orchidaceae and in grateful appreciation of the help which he has given me during my botanical trips in Mexico.

Pleurothallis Halbingeriana is closely allied to *P. propinqua* Ames of Costa Rica and to *P. lancilabris* (Reichb.f.) Schltr. of Costa Rica and southern Mexico.

Pleurothallis Halbingeriana agrees with *P. propinqua* in general floral structure, but the latter is much larger than the former in all its parts. Furthermore, *P. propinqua* has oblanceolate or spatulate leaves which are bilobulate at the apex and peduncles which only slightly overtop the leaves, whereas *P. Halbingeriana* has elliptical leaves which are strongly mucronate at the apex and peduncles which conspicuously overtop the leaves. Minor floral differences further separate these two species. The relationship between them, however, is extremely close.

Pleurothallis lancilabris, which Ames regards as a close ally of *P. propinqua*, is related to *P. Halbingeriana*; but the relationship is more remote than that between *P. propinqua* and *P. Halbingeriana*. Although vegetatively rather similar to *P. Halbingeriana*, *P. lancilabris* differs in having linear (not lanceolate) petals and very long-acuminate (not short-acuminate) sepals. Furthermore, the

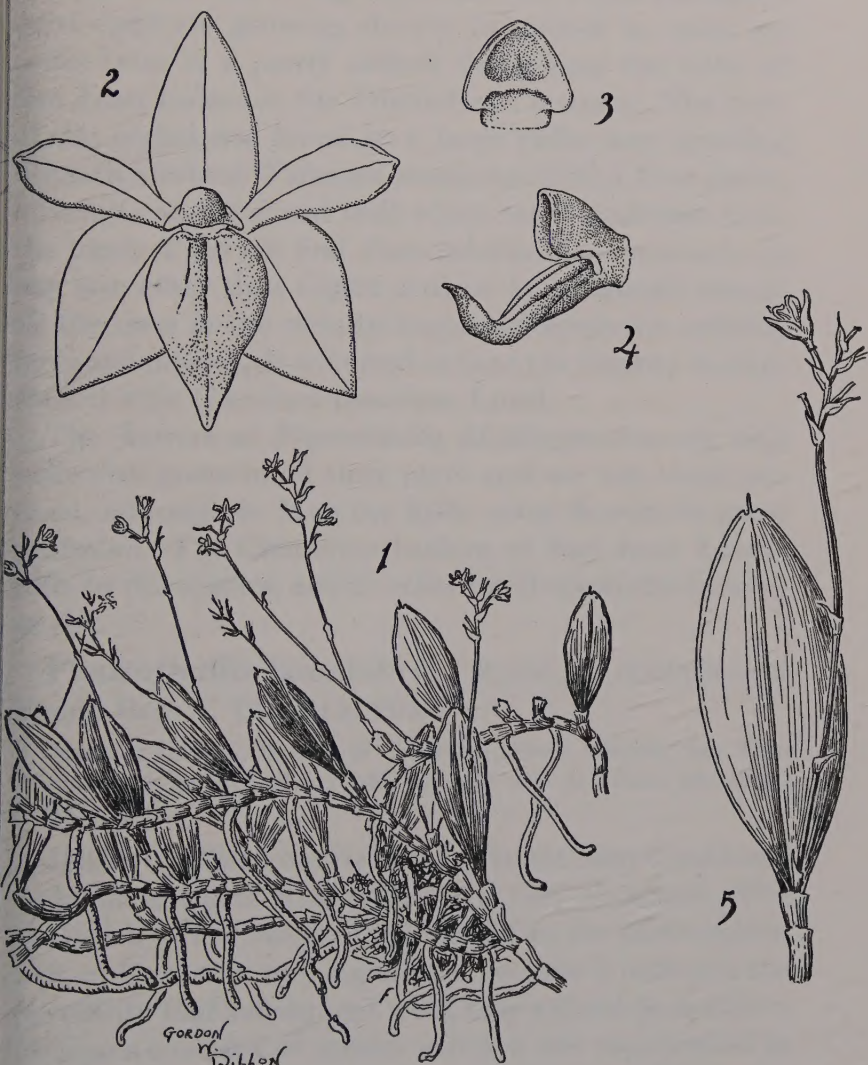
EXPLANATION OF THE ILLUSTRATION

PLEUROTHALLIS HALBINGERIANA *R. E. Schultes*. 1, plant about two and one half times natural size. 2, flower, magnified about twenty-five times. 3, column, magnified about twenty-five times. 4, lip and column, seen from the side, magnified about twenty-five times. 5, leaf and inflorescence, magnified about six times.

Drawn by G. W. DILLON

PLEUROTHALLIS

Stalbingeriana R. E. Schultes



inflorescence of *P. lancilabris* is extremely lax, whereas that of *P. Halbingeriana* is very congested. The habit of *P. Halbingeriana* is much more obviously repent than that of either *P. propinqua* or *P. lancilabris*.

Pleurothallis Halbingeriana is a very small inconspicuous epiphyte growing deeply imbedded in moss on coffee trees in a partly cleared forest near the town of San Juan Lalana in the District of Choapam. The type of this orchid was found on a large coffee tree growing beneath a robust *Talauma mexicana* (DC.) Don (*cacaloxochitl*) on the forest trail which leads southeast from the town. I did not find *Pleurothallis Halbingeriana* on any tree other than *Coffea arabica* L., although almost all the trees in the vicinity supported epiphytic orchids, ferns and mosses. It occurred in the type locality in association with *Oncidium pumilum* Lindl.

The flowers of *Pleurothallis Halbingeriana* are pale yellowish green in all their parts and are not easily noticed, although in May the little plant flowers in great profusion. The Chinantec Indians of San Juan Lalana refer to this species, and to other small epiphytic orchids, as *dzu*.

***Pleurothallis lancilabris* (Reichb.f.) Schlechter** in Fedde Rept. 12 (1913) 205.

MEXICO: Oaxaca, District of Cuicatlán, Cerro Machin, San Juan Zautla, long. $96^{\circ}40'$, lat. $17^{\circ}58'$, altitude 450 m., June 29, 1939, Schultes 738.

Hitherto, *Pleurothallis lancilabris* has been considered endemic to Costa Rica where it is very abundant. The extension of the range of this orchid to the northeastern part of Oaxaca is very significant because it indicates the possibility that subsequent work may extend to southern Mexico a complex of species which is not represented in herbaria by Mexican collections. It is one of the closest allies of *Pleurothallis Halbingeriana* of Oaxaca.

Pleurothallis Schiedei *Reichenbach filius* in *Linnaea* 22 (1849) 826.

MEXICO: Oaxaca, District of Cuicatlán, Río de Dormilones, Santa María de las Nieves, long. $96^{\circ}29'$, lat. $17^{\circ}47'$, altitude 1710 m., June 26, 1939, *Schultes* 709; District of Villa Alta, Cerro Zempoaltepetl, south of Ayutla, long. $96^{\circ}04'$, lat. $16^{\circ}59'$, April 5, 1934, altitude 2400 m., *Nagel* 3792.

Pleurothallis Schiedei is easily recognized by its reddish brown or maroon sepals which bear white, clavellate pubescence. It is a very rare orchid and is unknown outside of Mexico. The Ames Herbarium has one collection from Chiapas and two (cited above) from Oaxaca. The Oaxacan collections, while from the northeastern part of the state, are not from neighboring localities, but are separated by many miles and by several mountain chains. It is apparent that, although *Pleurothallis Schiedei* is a rare plant, it is distributed over a rather large area in southern Mexico. The type was collected in Mexico, but the precise locality is not known.

Pleurothallis sertularioides (*Sw.*) *Sprengel* Syst. Veg. 3 (1826) 721.

MEXICO: Oaxaca, District of Cuicatlán, Finca Unión Francesa, long. $96^{\circ}39'$, lat. $17^{\circ}55'$, altitude 350-450 m., June 28, 1939, *Schultes* 725.

Predominantly a West Indian species, *Pleurothallis sertularioides* has been collected in Honduras; it has been reported from Mexico (as *Pleurothallis tenuissima* Reichb.f.) on the basis of one previous collection. It is a rare plant in Oaxaca and is not abundant in the locality where it was collected.

ORCHID STUDIES, XIV

BY

LOUIS O. WILLIAMS

A NEW GENUS OF THE ORCHIDACEAE FROM BURMA

IN a collection of orchids sent for determination by Mr. F. G. Dickason, the following new genus was noted.

Dickasonia *L. O. Williams gen. nov.* Tribus Kerosphaerae, subtribus Coelogyneae, Orchidacearum.

Herbae epiphyticae. Pseudobulbi perennes, unifoliati (rare bifoliati). Folia lanceolata vel elliptica, petiolata, cum nervis quinque ad novem prominentibus, vernatione convoluta. Inflorescentia lateralis; racemus pauciflorus, plusminusve unilateralis. Sepala similia, libera, dorso carinata. Petala sepalis similia vel leviter minora. Labellum columnae adnatum, immobile, integrum, basi valdissime gibbosum vel leviter saccatum, ecallosum. Columna brevis, apoda; anthera operculata, incumbens, antherae loculi biloculares; pollinia quatuor, cerea; rostellum integrum; stigma semiorbiculare, margine prominenti.

Epiphytic herbs. Pseudobulbs perennial, unifoliate (rarely bifoliate), vernicose. Leaves lanceolate or elliptic, petiolate, with five to nine prominent nerves, vernation convolute. Inflorescence lateral, from the base of a pseudobulb; raceme few-flowered, usually unilateral. Sepals similar, free, carinate dorsally especially along the mid-nerve. Petals similar to the sepals but usually a little smaller. Lip adnate to the column, immobile, entire, strongly gibbous or somewhat saccate at base, ecallose. Column short, about one third as long as the petals, footless; anther operculate, incumbent, enclosed in the clinandrium, loculi of the anther bilocular; pollinia four,

ceraceous; rostellum entire; stigma semiorbicular, with raised and prominent margins.

Dickasonia is similar in habit to *Panisia* Lindl., but is easily distinguished from it by the lip which is adnate to the column, and also by the short column.

There are but two genera in the subtribe Coelogyneae which have the lip adnate to the column, *Gynoglottis* J.J. Smith and the present genus. *Dickasonia*, however, is more closely allied to *Panisia* and should be placed next to it in the classification proposed by Schlechter.

The genus is named for Mr. F. G. Dickason of Judson College, Rangoon, Burma, who has contributed to the orchid knowledge of that country through his collections.

***Dickasonia vernicosa* L. O. Williams sp. nov.**

Herbae parvae, epiphyticae, repentes vel caespitosae. Pseudobulbi subcylindracei vel ovati, unifoliati (rare bifoliati). Folia lanceolata vel elliptico-lanceolata, acuta vel acuminata. Sepalum dorsale ellipticum, acutum. Sepala lateralalia lanceolata, acuta. Petala oblanceolata, obtusa. Labellum obovatum apiculatum, ecallosum; unguis columnae adnatus, valdissime gibbosus vel subsaccatus. Columna generis.

Small epiphytic, repent or caespitose herbs up to 15 cm. high. Pseudobulbs 2–3 cm. long, subcylindric to ovoid, prominently ridged or winged, unifoliate (rarely bifoliate). Leaves 3–12 cm. long, 0.5–2.5 cm. broad, lanceolate to elliptic-lanceolate, acute or acuminate, petiolate. Inflorescence of the genus. Dorsal sepal 10–14 mm. long, 3–3.5 mm. broad, elliptic, acute, 3- to 5-nerved. Lateral sepals 11–14.5 mm. long, 2.5–4.5 mm. broad, lanceolate, acute, 3- to 5-nerved, with the middle nerve thickened dorsally. Petals 10–11 mm. long, 2.5–4 mm. broad, oblanceolate, obtuse, 3-nerved. Lip entire; lamina 8–10 mm. long, 2.5–4 mm. broad, obovate, obtuse, api-

culate, entire or somewhat crenulate, ecallose; claw 2.5-4 mm. long, adnate to the column, strongly gibbous or subsaccate at the base. Column 2.5-4 mm. long.

BURMA: on trees, Haka, at 5500 feet altitude, flowers white, odorless, April 5, 1937, *Dickason 7377*; epiphytic in deep shade, mossy forest, Haka, at 7625 feet altitude, flowers pure white, odorless, April 20, 1938, *Dickason 7524*; on trees, rare, Kyanksit Chaung, Chin Hill district, at 6500 feet altitude, flowers small, white, fragrant, April 1939, *Dickason 8576* (TYPE in Herb. Ames No. 57363).

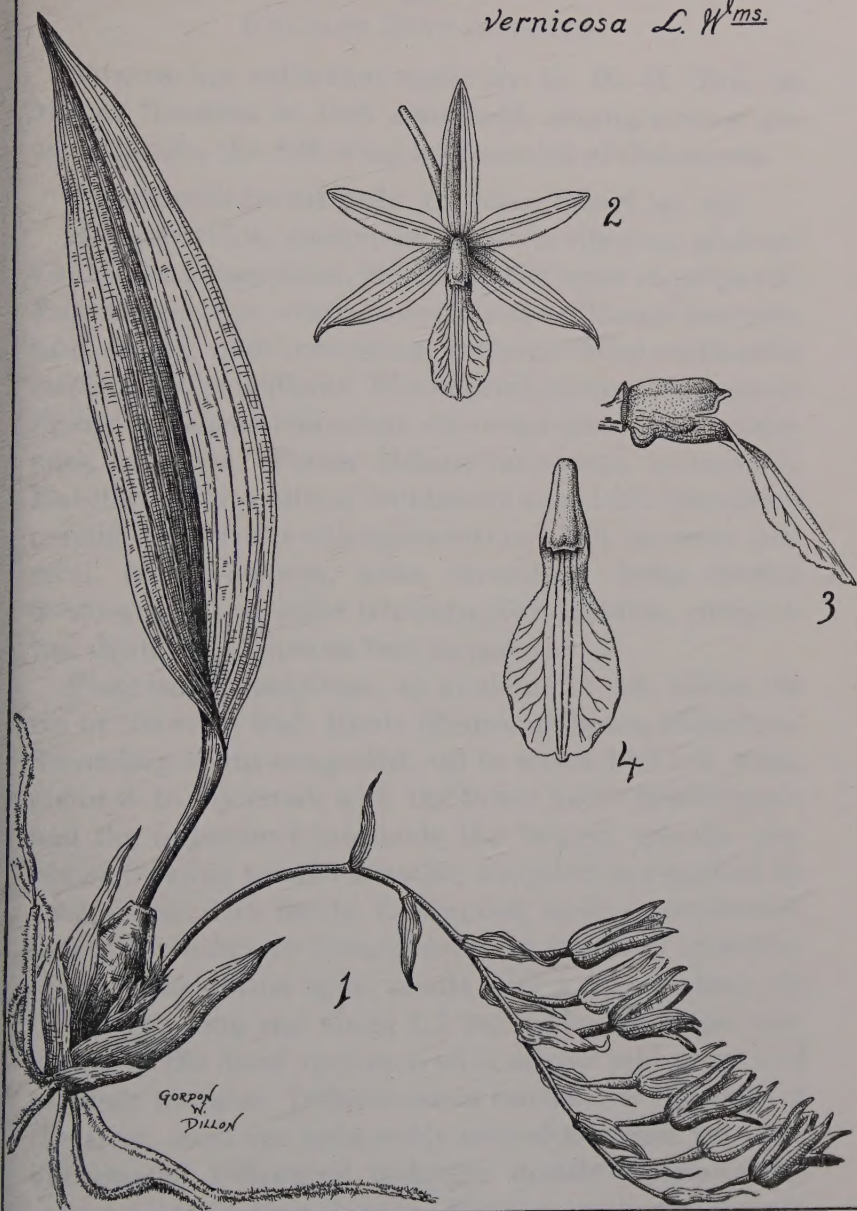
EXPLANATION OF THE ILLUSTRATION

DICKASONIA VERNICOSA *L. O. Williams.* 1, plant, natural size. 2, flower, opened out, magnified one and one half times. 3, lip and column, from the side, magnified three times. 4, lip and column, from above, magnified three times.

Drawn by G. W. DILLON

DICKASONIA

vernica L. ^{ms.}



DICKSONIA

PLANT. 2. 1874



A NEW SPECIES OF OCTOMERIA FROM MT. RORAIMA

BY
CHARLES SCHWEINFURTH

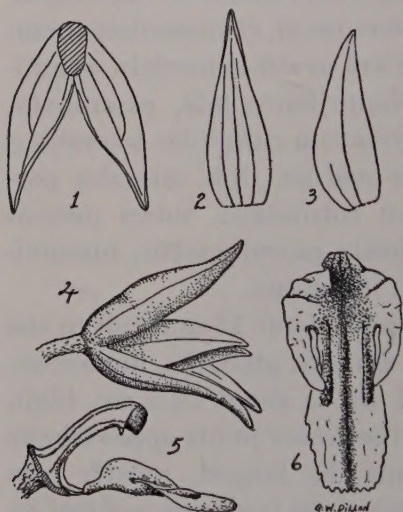
THE orchid collection made by G. H. H. Tate on Mount Roraima in 1927 contained, among several unusual plants, the following new species of Octomeria.

Octomeria monticola *C. Schweinfurth sp. nov.*

Herba parvula, caespitosa. Radices fibrosae, glabrae. Caules dense caespitosi, pluriarticulati, apice monophylli. Folium erectum, ovato-lanceolatum vel lineari-lanceolatum, sessile, valde coriaceum. Inflorescentiae caulis apice fasciculatae, pauciflorae. Flores parvi, campanulati, membranacei. Sepala lanceolata vel ovato-lanceolata, acuminata, trinervia. Petala oblique lanceolata, acuminata. Labellum multo minus, trilobatum cum lobis lateralibus erectis, in circuitu oblongo-ovatum; lobi laterales porrecti, falcato-oblongi, apice rotundati; lobus medius ovato-quadratus, apice truncato pluridentatus, marginibus dentatis. Columna basi incrassata.

Plant small, caespitose, up to about 15 cm. tall to the tip of the erect leaf. Roots fibrous, glabrous, numerous. Secondary stems congested, up to about 10.5 cm. high, about 3- to 5-jointed, with the lower joints approximate and the uppermost internode the largest, mostly concealed by close tubular sheaths; the joints are marked by conspicuous dark bands. Leaf apical, erect, ovate-lanceolate to lanceolate or linear-lanceolate, minutely tridenticulate at the obtuse apex, sessile with a cuneate base, up to 5.4 cm. long and about 1.1 cm. wide, rigid and coriaceous in the dried specimen with sulcate mid-nerve and revolute margins. Inflorescences fascicled at the apex of the stem, each one apparently several-flowered with the abbreviated 1-flowered peduncle mostly concealed by scarious imbricating sheaths. Flowers small, membrana-

ceous. Sepals lanceolate or ovate-lanceolate, acuminate, 3-nerved. Dorsal sepal up to about 6 mm. long and 2 mm. wide, concave. Lateral sepals up to about 5.8 mm. long and 1.6 mm. wide, lightly oblique, concave. Petals obliquely lanceolate, acuminate, 2- to 3-nerved at the base, up to about 5.1 mm. long and 1.8 mm. wide. Lip much smaller, 3-lobed near the base with the lateral lobes erect and parallel in natural position, about 2.6 mm. long; when expanded the lamina is oblong-ovate with a broadly cuneate base; lateral lobes falcate-oblong, lightly incurved, rounded at the apex; mid-lobe ovate-quadrangle, about 1.7 mm. long, broadly truncate with a pluridentate apex,



1, lateral sepals, magnified about 5 times. 2, dorsal sepal, magnified about 5 times. 3, petal, magnified 5 times. 4, flower from the side, magnified about 5 times. 5, column and lip, magnified about 10 times. 6, lip, magnified about 15 times.

coarsely dentate on each side; disc with a thickened mid-nerve and a pair of low keels extending from the base of the lateral lobes almost to the middle of the mid-lobe. Column lightly arcuate, dilated below, up to about 2 mm. long. Anther hemispherical, incumbent, opercular, 2-celled.

There appear to be no near allies of this species. Distinctive features are the small sessile leaves and the small flowers with the relatively long porrect lateral lobes and dentate mid-lobe of the lip.

BRITISH GUIANA and northern BRAZIL, summit of Mt. Roraima, flowers pinkish, November 28, 1927, G. H. H. Tate 425 (TYPE in Herb. N. Y. Bot. Gard.; DUPLICATE TYPE in Herb. Ames No. 58323).